

## Hit List

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### Search Results - Record(s) 1 through 7 of 7 returned.

☐ 1. Document ID: US 20040257073 A1

L89: Entry 1 of 7

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: [324/300](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Drawings
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☐ 2. Document ID: US 3321604 A

L89: Entry 2 of 7

File: USOC

May 23, 1967

US-PAT-NO: 3321604

DOCUMENT-IDENTIFIER: US 3321604 A

TITLE: Electronic oven

DATE-ISSUED: May 23, 1967

INVENTOR-NAME: STECCA ANTHONY J; BARNAS LOUIS A ; DOKOS SOPHOCLES J ; JARZEMBSKI  
WILLIAM B ; NORRIS PAUL C

US-CL-CURRENT: [219/709](#), [219/745](#), [219/750](#), [331/101](#), [333/232](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Drawings
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☐ 3. Document ID: US 3278868 A

L89: Entry 3 of 7

File: USOC

Oct 11, 1966

US-PAT-NO: 3278868  
DOCUMENT-IDENTIFIER: US 3278868 A

TITLE: Cavity resonator

DATE-ISSUED: October 11, 1966

INVENTOR-NAME: ALFRED KACH

US-CL-CURRENT: 333/231

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMIC	Draw D
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4. Document ID: US 2944133 A

L89: Entry 4 of 7

File: USOC

Jul 5, 1960

US-PAT-NO: 2944133  
DOCUMENT-IDENTIFIER: US 2944133 A

TITLE: Radio frequency dielectric heating apparatus

DATE-ISSUED: July 5, 1960

INVENTOR-NAME: TIBBS CHRISTOPHER E M

US-CL-CURRENT: 219/770; 219/778, 333/219

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMIC	Draw D
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5. Document ID: US 2784378 A

L89: Entry 5 of 7

File: USOC

Mar 5, 1957

US-PAT-NO: 2784378  
DOCUMENT-IDENTIFIER: US 2784378 A

TITLE: Magnetically controlled microwave structures

DATE-ISSUED: March 5, 1957

INVENTOR-NAME: YAGER WILLIAM A

US-CL-CURRENT: 332/163; 332/173, 333/230, 333/24.1, 333/81B

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMIC	Draw D
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6. Document ID: US 2764742 A

L89: Entry 6 of 7

File: USOC

Sep 25, 1956

US-PAT-NO: 2764742

DOCUMENT-IDENTIFIER: US 2764742 A

TITLE: Variable tuning structures

DATE-ISSUED: September 25, 1956

INVENTOR-NAME: CADY CHARLES E; WAGNER ROSWELL W

US-CL-CURRENT: 333/221, 336/144

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	INOC	Draw D
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☐ 7. Document ID: US 2626356 A

L89: Entry 7 of 7

File: USOC

Jan 20, 1953

US-PAT-NO: 2626356

DOCUMENT-IDENTIFIER: US 2626356 A

TITLE: Ultrahigh-frequency generator

DATE-ISSUED: January 20, 1953

INVENTOR-NAME: GIBSON JOHN E

US-CL-CURRENT: 331/70; 315/5.16, 315/5.44, 330/45, 331/181, 331/98, 333/235

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	INOC	Draw D
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Term	Documents
FIRST	7836164
FIRSTS	1061
SECOND	7047557
SECONDS	681773
THIRD	2721769
THIRDS	58558
PRIMARY	1992369
PRIM	50981
SECONDARY	1189300
SEC	780638
TERTIARY	275132
(L88 AND ((FIRST OR SECOND OR THIRD OR	

PRIMARY OR SECONDARY OR TERTIARY OR "1ST" OR "2ND" OR "3RD") SAME (CONTROL\$4 OR EVALUAT\$4 OR PIN OR DIODE OR RELAY OR SWITCH\$4 OR ANALYSIS OR ANALYZ\$4 OR CONTROLLABLE OR ADJUST\$4) SAME (ISOLAT\$4 OR INDIVIDUAL\$2 OR INDEPENDENT\$2 OR SEPARAT\$4 OR RESPECTIV\$3) SAME (STATE OR "ON" OR "OFF" OR ACTIVE OR INACTIVE OR ACTIVAT\$4 OR INACTIV\$4 OR MODE)) .PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	7
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## WEST Search History





DATE: Tuesday, April 10, 2007

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		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L90	L89 and ((magnetic adj resonan\$2) or MRI or NMR)	1
<input type="checkbox"/>	L89	L88 and ((first or second or third or primary or secondary or tertiary or "1st" or "2nd" or "3rd") same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable or adjust\$4) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	7
<input type="checkbox"/>	L88	L87 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4)) same (parallel) same ((length or distance) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))))	12
<input type="checkbox"/>	L87	L86 and (((coil or antenna or probe or winding) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same (extend\$4 or project\$4) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))))	468
<input type="checkbox"/>	L86	((324/300-322.ccls.) or (333/219-235.ccls.))	15531
<input type="checkbox"/>	L85	L84 and (((coil or antenna or probe or winding) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same (extend\$4 or project\$4) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))))	1
<input type="checkbox"/>	L84	L83 and ((first or second or third or primary or secondary or tertiary or "1st" or "2nd" or "3rd") same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable or adjust\$4) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	2
<input type="checkbox"/>	L83	L1 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4)) same (parallel) same ((length or distance) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))))	
		L81 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR	

┐	L82	CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4)) same (parallel) same ((length or distance) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))))	
┐	L81	L79 and ((length or distance) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))))	2
┐	L80	L79 and (distance)	1
┐	L79	L78 and ((select\$4 or selectively or choose or chosen or choosing or choosable or choice) same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable or adjust\$4) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	2
┐	L78	L76 and ((control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable) same (radio-frequency or "RF" or radiofrequency or "radio frequency" or frequency) same ((transmit\$4 or transmission or sent or send\$3 or excit\$4 or excitation) with (current)))	2
┐	L77	L76 and ((select\$4 or selectively or choose or chosen or choosing or choosable or choice) same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable) same (radio-frequency or "RF" or radiofrequency or "radio frequency" or frequency) same ((transmit\$4 or transmission or sent or send\$3 or excit\$4 or excitation) with (current)))	0
┐	L76	L75 and ((lag\$4 or lead\$4 and below or above or front or back or behind or ahead or before or after) same ((transmit\$4 or transmission or sent or send\$3 or excit\$4 or excitation) with (current)))	2
┐	L75	L74 and ((lag\$4 or lead\$4 and below or above or front or back or behind or ahead or before or after) same (current))	3
┐	L74	L73 and ((select\$4 or selectively or choose or chosen or choosing or choosable or choice) same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (tune or tuned or tuning or tunable or align\$4) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY))	3
┐	L73	L72 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4)) same (parallel))	6
┐	L72	L71 and ((first or second or third or primary or secondary or tertiary or "1st" or "2nd" or "3rd") same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable or adjust\$4) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	108
┐	L71	11 and (((coil or antenna or probe or winding) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same (extend\$4 or project\$4) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or	423

- substructure or subarray or sub-array) same (axis or axes)))
- ┐ L70 L69 and ((first or second or third or primary or secondary or tertiary or "1st" or "2nd" or "3rd") same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable or adjust\$4) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode)) 1
- ┐ L69 L68 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4)) same (parallel)) 2
- ┐ L68 L18 and (((coil or antenna or probe or winding) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same (extend\$4 or project\$4) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))) 54
- ┐ L67 L66 and (((coil or antenna or probe or winding) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same (extend\$4 or project\$4) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))) 1
- ┐ L66 L65 and ((tune or tuned or tuning or tunable or align\$4) same (section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (port or COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode)) 4
- ┐ L65 L64 and ((first or second or third or primary or secondary or tertiary or "1st" or "2nd" or "3rd") same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable or adjust\$4) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode)) 4
- ┐ L64 L56 and (((coil or antenna or probe or winding) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))) 6
- ┐ L63 L62 and (((coil or antenna or probe or winding) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes))) 1
- ┐ L62 L61 and ((section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (axis or axes)) 2
- ┐ L61 L60 and (((tune or tuned or tuning or tunable or align\$4) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((first or second or third or primary or secondary or tertiary or "1st" or "2nd" or "3rd") same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or 2

		controllable or adjust\$4) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode)))	
┐	L60	L59 and ((first or second or third or primary or secondary or tertiary or "1st" or "2nd" or "3rd") same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable or adjust\$4) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	3
┐	L59	L58 and ((select\$4 or selectively or choose or chosen or choosing or choosable or choice) same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable or adjust\$4) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (tune or tuned or tuning or tunable or align\$4) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY))	4
┐	L58	L57 and ((lag\$4 or lead\$4 and below or above or front or back or behind or ahead or before or after) same (current))	7
┐	L57	L56 and ((tune or tuned or tuning or tunable or align\$4) same (section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (port or COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	8
┐	L56	L55 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4)) same (parallel))	19
┐	L55	L54 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4)))	19
┐	L54	L18 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4))) same (parallel))	19
┐	L53	L19 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4))) same (parallel))	12
┐	L52	L49 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4))) same (parallel))	1
┐	L51	L50 and (multiplex\$3 or diplex\$3 or triplex\$3 or mux or multiplexer)	2
┐	L50	L49 and ((first or second or third or primary or secondary or tertiary or "1st" or "2nd" or "3rd") same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode or channel or deactivat\$4 or de-activat\$4))	3
		L48 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR	



┐	L49	CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4))) same (coil or antenna or probe or winding)	3
┐	L48	L26 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4)))	3
┐	L47	L46 and (((auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2") same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) same ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4)))	1
┐	L46	L45 and ((lag\$4 or lead\$4 and below or above or front or back or behind or ahead or before or after) same ((transmit\$4 or transmission or sent or send\$3 or excit\$4 or excitation) with (current)))	4
┐	L45	L44 and ((lag\$4 or lead\$4 and below or above or front or back or behind or ahead or before or after) same (current))	4
┐	L44	L43 and ((transmit\$4 or transmission or sent or send\$3 or excit\$4 or excitation) with (current))	4
┐	L43	L26 and (current with (distribut\$4))	4
┐	L42	L31 and (multiplex\$4 or diplex\$3 or triplex\$3 or mux or multiplexer)	10
┐	L41	L33 and (multiplex\$4 or diplex\$3 or triplex\$3 or mux or multiplexer)	10
┐	L40	L33 and (multiplex\$4 or diplex\$3 or triplex\$3)	10
┐	L39	L38 and (multiplex\$4 or diplex\$3 or triplex\$3)	10
┐	L38	L33 and ((tune or tuned or tuning or tunable or align\$4) same (section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array or port or channel) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode or channel or deactivat\$4 or de-activat\$4))	15
┐	L37	L33 and ((tune or tuned or tuning or tunable or align\$4) same (section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array or port) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode or channel or deactivat\$4 or de-activat\$4))	11
┐	L36	L33 and ((tune or tuned or tuning or tunable or align\$4) same (section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array or port) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode or channel or deactivat\$4 or de-activat\$4))	11
┐	L35	L33 and ((tune or tuned or tuning or tunable or align\$4) same (section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array or port) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	11
		L33 and ((tune or tuned or tuning or tunable or align\$4) same (section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or	

┐	L34	part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array) same (port or COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	9
┐	L33	L32 and ((lag\$4 or lead\$4 and below or above or front or back or behind or ahead or before or after) same (current))	30
┐	L32	L31 and ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4) same (coil or antenna or probe or winding))	31
┐	L31	L28 and ((tune or tuned or tuning or tunable or align\$4) same (section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array or COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	36
┐	L30	L28 and (offset\$4 or off-set\$4)	15
┐	L29	L28 and (offset\$4 or off-set\$4)	15
┐	L28	L25 and ((tune or tuned or tuning or tunable or align\$4) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY) same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable) same (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode))	36
┐	L27	L25 and (monski.in.)	2
┐	L26	L25 and ((select\$4 or selectively or choose or chosen or choosing or choosable or choice) same (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable) same (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3) same (tune or tuned or tuning or tunable or align\$4) same (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY))	8
┐	L25	L24 and (ring or loop or anulus or anular\$2 or annular\$2 or ferrules)	85
┐	L24	L23 and (capacit\$4 or capacitively)	87
┐	L23	L22 and (rod or bar or rung)	89
┐	L22	L21 and (shield\$4)	185
┐	L21	L20 and ((induct\$4 or inductively) same (coupl\$4 or decoupl\$4 or de-coupl\$4))	355
┐	L20	L19 and (induct\$4 or inductively)	875
┐	L19	L18 and (overlap\$4 or over-lap\$4)	1306
┐	L18	L17 and (isolat\$4 or individual\$2 or independent\$2 or separat\$4 or respectiv\$3)	2692
┐	L17	L16 and (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)	2719
┐	L16	L15 and (lag\$4 or lead\$4 and below or above or front or back or behind or ahead or before or after)	2731
┐	L15	L14 and (radio-frequency or "RF" or radiofrequency or "radio frequency" or frequency)	2737
┐	L14	L13 and (coil or antenna or probe or winding)	8726
┐	L13	L12 and (control\$4 or evaluat\$4 or PIN or diode or relay or switch\$4 or analysis or analyz\$4 or controllable)	9652

┐	L12	L11 and (select\$4 or selectively or choose or chosen or choosing or choosable or choice)	9706
┐	L11	L10 and (state or "on" or "off" or active or inactive or activat\$4 or inactiv\$4 or mode)	9885
┐	L10	L8 and (current)	10141
┐	L9	L8 and (current)	7
┐	L8	L7 and (section or portion\$4 or subsection\$4 or sub-section\$4 or segment\$3 or segmentation or part or segmentable or sectionable or sub-structure or substructure or subarray or sub-array)	12214
┐	L7	L6 and (auxiliary or auxilliary or additional or separate or another or supplemental\$2 or "adjacent\$2")	12266
┐	L6	L5 and (resonan\$2 or resonance or resonat\$4)	12870
┐	L5	L4 and (tune or tuned or tuning or tunable or align\$4)	17211
┐	L4	L3 and (coupl\$4 or decoupl\$4 or de-coupl\$4)	44858
┐	L3	L2 and (first or second or third or primary or secondary or tertiary or "1st" or "2nd" or "3rd")	78844
┐	L2	L1 and (head or birdcage or bird-cage or "bird cage" or cylinder or cylindrical\$2 or brain or neurovascular\$3 or "NVA")	83749
┐	L1	((magnetic adj resonan\$2) or MRI or NMR)	249632

END OF SEARCH HISTORY

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### Search Results - Record(s) 1 through 8 of 8 returned.

☐ 1. Document ID: US 20070007964 A1

L26: Entry 1 of 8

File: PGPB

Jan 11, 2007

PGPUB-DOCUMENT-NUMBER: 20070007964

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20070007964 A1

TITLE: RF coil for imaging system

PUBLICATION-DATE: January 11, 2007

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Vaughan; J. Thomas JR.

Stillwater

MN

US

US-CL-CURRENT: 324/322; 324/318

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	K00C	Draw D
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☐ 2. Document ID: US 20060033501 A1

L26: Entry 2 of 8

File: PGPB

Feb 16, 2006

PGPUB-DOCUMENT-NUMBER: 20060033501

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060033501 A1

TITLE: RF coil for imaging system

PUBLICATION-DATE: February 16, 2006

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Vaughan; J. Thomas JR.

Stillwater

MN

US

US-CL-CURRENT: 324/322; 324/318

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	K00C	Draw D
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☐ 3. Document ID: US 20040257073 A1

L26: Entry 3 of 8

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMC	Draw D
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☐ 4. Document ID: US 20040140808 A1

L26: Entry 4 of 8

File: PGPB

Jul 22, 2004

PGPUB-DOCUMENT-NUMBER: 20040140808  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040140808 A1

TITLE: RF coil for imaging system

PUBLICATION-DATE: July 22, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Vaughan, J. Thoma's JR.	Stillwater	MN	US

US-CL-CURRENT: 324/318; 324/322

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMC	Draw D
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☐ 5. Document ID: US 20030146750 A1

L26: Entry 5 of 8

File: PGPB

Aug 7, 2003

PGPUB-DOCUMENT-NUMBER: 20030146750  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030146750 A1

TITLE: RF coil for imaging system

PUBLICATION-DATE: August 7, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Vaughan, J. Thomas JR.	Stillwater	MN	US

US-CL-CURRENT: 324/318; 707/104.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 6. Document ID: US 6633161 B1

L26: Entry 6 of 8

File: USPT

Oct 14, 2003

US-PAT-NO: 6633161

DOCUMENT-IDENTIFIER: US 6633161 B1

TITLE: RF coil for imaging system

DATE-ISSUED: October 14, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Vaughan, Jr.; J. Thomas	Stillwater	MN		

US-CL-CURRENT: 324/318; 324/322

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
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☐ 7. Document ID: US 6291994 B1

L26: Entry 7 of 8

File: USPT

Sep 18, 2001

US-PAT-NO: 6291994

DOCUMENT-IDENTIFIER: US 6291994 B1

TITLE: Active Q-damping sub-system using nuclear quadrupole resonance and nuclear magnetic resonance for improved contraband detection

DATE-ISSUED: September 18, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kim; Yong-Wah	Toledo	OH		
Magnuson; Erik E.	Cardiff	CA		
Skvoretz; David C.	Poway	CA		

US-CL-CURRENT: 324/300; 324/318, 324/322

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	--------

8. Document ID: US 5020411 A

L26: Entry 8 of 8

File: USPT

Jun 4, 1991

US-PAT-NO: 5020411

DOCUMENT-IDENTIFIER: US 5020411 A

TITLE: Mobile assault logistic kinetmatic engagement device

DATE-ISSUED: June 4, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
------	------	-------	----------	---------

## Hit List

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Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 20040257073 A1

L49: Entry 1 of 3

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMIC	Draw D
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☐ 2. Document ID: US 6291994 B1

L49: Entry 2 of 3

File: USPT

Sep 18, 2001

US-PAT-NO: 6291994

DOCUMENT-IDENTIFIER: US 6291994 B1

TITLE: Active Q-damping sub-system using nuclear quadrupole resonance and nuclear magnetic resonance for improved contraband detection

DATE-ISSUED: September 18, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kim; Yong-Wah	Toledo	OH		
Magnuson; Erik E.	Cardiff	CA		
Skvoretz; David C.	Poway	CA		

US-CL-CURRENT: 324/300; 324/318, 324/322

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMIC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------



3. Document ID: US 5020411 A

L49: Entry 3 of 3

File: USPT

Jun 4, 1991

US-PAT-NO: 5020411

DOCUMENT-IDENTIFIER: US 5020411 A

TITLE: Mobile assault logistic kinetmatic engagement device

DATE-ISSUED: June 4, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rowan; Larry	Culver	CA	90230	

US-CL-CURRENT: 89/1.11; 376/319, 60/203.1, 89/8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	IMC	Draw D
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Bkwd Refs

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Term	Documents
AUXILIARY	752387
AUXILIARIES	37878
AUXILIARYS	18
AUXILLIARY	4784
AUXILLIARIES	231
AUXILLIARYS	0
ADDITIONAL	3402015
ADDITIONALS	50
SEPARATE	3066152
SEPARATES	365227
ANOTHER	13
(L48 AND (((AUXILIARY OR AUXILLIARY OR ADDITIONAL OR SEPARATE OR ANOTHER OR SUPPLEMENTAL\$2 OR "ADJACENT\$2") SAME (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) SAME ((INDUCT\$4 OR INDUCTIVELY) SAME (COUPL\$4 OR DECOUPL\$4 OR DE-COUPL\$4))) SAME (COIL OR ANTENNA OR PROBE OR WINDING))) .PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3

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**Search Results - Record(s) 1 through 2 of 2 returned.**

☐ 1. Document ID: US 20040257073 A1

L51: Entry 1 of 2

File: PGPB.

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	IMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	-----	--------

☐ 2. Document ID: US 5020411 A

L51: Entry 2 of 2

File: USPT

Jun 4, 1991

US-PAT-NO: 5020411

DOCUMENT-IDENTIFIER: US 5020411 A

TITLE: Mobile assault logistic kinetmatic engagement device

DATE-ISSUED: June 4, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rowan; Larry	Culver	CA	90230	

US-CL-CURRENT: 89/1.11; 376/319, 60/203.1, 89/8

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	IMC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	-----	--------

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Term	Documents
MUX	30814
MUXES	3320
MULTIPLEXER	168743
MULTIPLEXERS	51759
MULTIPLEX\$3	0
MULTIPLEX	138135
MULTIPLEXA	1
MULTIPLEXAGE	25
MULTIPLEXAL	4
MULTIPLEXAR	7
MULTIPLEXARE	1
(L50 AND (MULTIPLEX\$3 OR DIPLEX\$3 OR TRIPLEX\$3 OR MUX OR MULTIPLEXER) ) .PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	2

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Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 20040257073 A1

L52: Entry 1 of 1

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Greim, Helmut

Adelsdorf

DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw D
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[Generate OACS](#)

Term	Documents
AUXILIARY	752387
AUXILIARIES	37878
AUXILIARYS	18
AUXILLIARY	4784
AUXILLIARIES	231
AUXILLIARYS	0
ADDITIONAL	3402015
ADDITIONALS	50
SEPARATE	3066152
SEPARATES	365227
ANOTHER	13
(L49 AND (((AUXILIARY OR AUXILLIARY OR ADDITIONAL OR SEPARATE OR ANOTHER OR	

SUPPLEMENTAL\$2 OR "ADJACENT\$2") SAME (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) SAME ((INDUCT\$4 OR INDUCTIVELY) SAME (COUPL\$4 OR DECOUPL\$4 OR DE-COUPL\$4))) SAME (PARALLEL)) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	1
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### Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 20040257073 A1

L59: Entry 1 of 4

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 5666055 A

L59: Entry 2 of 4

File: USPT

Sep 9, 1997

US-PAT-NO: 5666055

DOCUMENT-IDENTIFIER: US 5666055 A

TITLE: Surface coil system for a single channel NMR receiver

DATE-ISSUED: September 9, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jones; Randall W.	Elkhorn	NE	68022	
Davis; Fred	LaVista	NE	68128	

US-CL-CURRENT: 324/318; 324/322

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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## 3. Document ID: US 4620155 A

L59: Entry 3 of 4

File: USPT

Oct 28, 1986

US-PAT-NO: 4620155

DOCUMENT-IDENTIFIER: US 4620155 A

TITLE: Nuclear magnetic resonance imaging antenna subsystem having a plurality of non-orthogonal surface coils

DATE-ISSUED: October 28, 1986

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Edelstein; William A.	Schenectady	NY		

US-CL-CURRENT: 324/322; 324/318

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMK	Draw D.
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## 4. Document ID: US 2301184 A

L59: Entry 4 of 4

File: USOC

Nov 10, 1942

US-PAT-NO: 2301184

DOCUMENT-IDENTIFIER: US 2301184 A

TITLE: Electrical clarinet

DATE-ISSUED: November 10, 1942

INVENTOR-NAME: ARNOLD LEO F J

US-CL-CURRENT: 84/742; 984/344

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMK	Draw D.
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Clear

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Fwd Refs

Bkwd Refs

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Term	Documents
SELECTIVELY	1533502
SELECTIVELIES	0
SELECTIVELYS	5
CHOOSE	195605
CHOOSES	71152
CHOSEN	1031379
CHOSENS	4

CHOOSING	146694
CHOOSINGS	8
CHOOSABLE	258
CHOOSABLES	0
(L58 AND ((SELECT\$4 OR SELECTIVELY OR CHOOSE OR CHOSEN OR CHOOSING OR CHOOSABLE OR CHOICE) SAME (CONTROL\$4 OR EVALUAT\$4 OR PIN OR DIODE OR RELAY OR SWITCH\$4 OR ANALYSIS OR ANALYZ\$4 OR CONTROLLABLE OR ADJUST\$4) SAME (ISOLAT\$4 OR INDIVIDUAL\$2 OR INDEPENDENT\$2 OR SEPARAT\$4 OR RESPECTIV\$3) SAME (TUNE OR TUNED OR TUNING OR TUNABLE OR ALIGN\$4) SAME (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) ) .PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	4

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☐ 1. Document ID: US 20040257073 A1

L60: Entry 1 of 3

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	IMC	Draw D
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☐ 2. Document ID: US 5666055 A

L60: Entry 2 of 3

File: USPT

Sep 9, 1997

US-PAT-NO: 5666055

DOCUMENT-IDENTIFIER: US 5666055 A

TITLE: Surface coil system for a single channel NMR receiver

DATE-ISSUED: September 9, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jones; Randall W.	Elkhorn	NE	68022	
Davis; Fred	LaVista	NE	68128	

US-CL-CURRENT: 324/318; 324/322

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	IMC	Draw D
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3. Document ID: US 2301184 A

L60: Entry 3 of 3

File: USOC

Nov 10, 1942

US-PAT-NO: 2301184

DOCUMENT-IDENTIFIER: US 2301184 A

TITLE: Electrical clarinet

DATE-ISSUED: November 10, 1942

INVENTOR-NAME: ARNOLD LEO F J

US-CL-CURRENT: 84/742; 984/344

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMIC	Draw D.
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Clear

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Fwd Refs

Bkwd Refs

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Term	Documents
FIRST	7836164
FIRSTS	1061
SECOND	7047557
SECONDS	681773
THIRD	2721769
THIRDS	58558
PRIMARY	1992369
PRIM	50981
SECONDARY	1189300
SEC	780638
TERTIARY	275132
(L59 AND ((FIRST OR SECOND OR THIRD OR PRIMARY OR SECONDARY OR TERTIARY OR "1ST" OR "2ND" OR "3RD") SAME (CONTROL\$4 OR EVALUAT\$4 OR PIN OR DIODE OR RELAY OR SWITCH\$4 OR ANALYSIS OR ANALYZ\$4 OR CONTROLLABLE OR ADJUST\$4) SAME (ISOLAT\$4 OR INDIVIDUAL\$2 OR INDEPENDENT\$2 OR SEPARAT\$4 OR RESPECTIV\$3) SAME (STATE OR "ON" OR "OFF" OR ACTIVE OR INACTIVE OR ACTIVAT\$4 OR INACTIV\$4 OR MODE)) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3

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### Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20040257073 A1

L61: Entry 1 of 2

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D.
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 2. Document ID: US 5666055 A

L61: Entry 2 of 2

File: USPT

Sep 9, 1997

US-PAT-NO: 5666055

DOCUMENT-IDENTIFIER: US 5666055 A

TITLE: Surface coil system for a single channel NMR receiver

DATE-ISSUED: September 9, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jones; Randall W.	Elkhorn	NE	68022	
Davis; Fred	LaVista	NE	68128	

US-CL-CURRENT: 324/318; 324/322

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D.
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Term	Documents
TUNE	120363
TUNES	18605
TUNED	174703
TUNEDS	0
TUNING	179830
TUNINGS	826
TUNABLE	53171
TUNABLES	44
COMPONENT	3063550
COMPONENTS	3542659
ELEMENT	3834634
(L60 AND ((TUNE OR TUNED OR TUNING OR TUNABLE OR ALIGN\$4) SAME (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) SAME ((FIRST OR SECOND OR THIRD OR PRIMARY OR SECONDARY OR TERTIARY OR "1ST" OR "2ND" OR "3RD") SAME (CONTROL\$4 OR EVALUAT\$4 OR PIN OR DIODE OR RELAY OR SWITCH\$4 OR ANALYSIS OR ANALYZ\$4 OR CONTROLLABLE OR ADJUST\$4) SAME (ISOLAT\$4 OR INDIVIDUAL\$2 OR INDEPENDENT\$2 OR SEPARAT\$4 OR RESPECTIV\$3) SAME (STATE OR "ON" OR "OFF" OR ACTIVE OR INACTIVE OR ACTIVAT\$4 OR INACTIV\$4 OR MODE))) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	2

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**Search Results - Record(s) 1 through 1 of 1 returned.**

☐ 1. Document ID: US 20040257073 A1

L63: Entry 1 of 1

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMK	Draw D
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Term	Documents
COIL	1335125
COILS	442793
ANTENNA	405437
ANTENNAS	97642
PROBE	403790
PROBES	189855
WINDING	734350
WINDINGS	248167
COMPONENT	3063550
COMPONENTS	3542659
ELEMENT	3834634
(L62 AND ((COIL OR ANTENNA OR PROBE OR WINDING) SAME (COMPONENT OR ELEMENT OR CIRCUIT	

OR CIRCUITRY)) SAME ((SECTION OR PORTION\$4 OR SUBSECTION\$4 OR SUB-SECTION\$4 OR SEGMENT\$3 OR SEGMENTATION OR PART OR SEGMENTABLE OR SECTIONABLE OR SUB-STRUCTURE OR SUBSTRUCTURE OR SUBARRAY OR SUB-ARRAY) SAME (AXIS OR AXES))) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	1
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☐ 1. Document ID: US 20070066885 A1

L65: Entry 1 of 4

File: PGPB

Mar 22, 2007

PGPUB-DOCUMENT-NUMBER: 20070066885

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20070066885 A1

TITLE: Cavity Resonator For MR Systems

PUBLICATION-DATE: March 22, 2007

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Vaughan; John T.	Stillwater	MN	US

US-CL-CURRENT: 600/411; 324/318, 600/421

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RWC	Draw D
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☐ 2. Document ID: US 20040257073 A1

L65: Entry 2 of 4

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RWC	Draw D
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☐ 3. Document ID: US 5202635 A

L65: Entry 3 of 4

File: USPT

Apr 13, 1993

US-PAT-NO: 5202635

DOCUMENT-IDENTIFIER: US 5202635 A

TITLE: Radio frequency volume resonator for nuclear magnetic resonance

DATE-ISSUED: April 13, 1993

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Srinivasan; Ravi	Philadelphia	PA		
Murphy-Boesch; Joseph	Lafayette Hills	PA		

US-CL-CURRENT: 324/322; 324/318

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMIC	Draw D
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☐ 4. Document ID: US 5194811 A

L65: Entry 4 of 4

File: USPT

Mar 16, 1993

US-PAT-NO: 5194811

DOCUMENT-IDENTIFIER: US 5194811 A

TITLE: Radio frequency volume resonator for nuclear magnetic resonance

DATE-ISSUED: March 16, 1993

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Murphy-Boesch; Joseph	Lafayette Hill	PA		
Srinivasan; Ravi	Philadelphia	PA		

US-CL-CURRENT: 324/322; 324/318

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMIC	Draw D
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Clear

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Fwd Refs

Bkwd Refs

Generate OACS

Term	Documents
FIRST	7836164
FIRSTS	1061
SECOND	7047557
SECONDS	681773
THIRD	2721769



THIRDS	58558
PRIMARY	1992369
PRIM	50981
SECONDARY	1189300
SEC	780638
TERTIARY	275132
(L64 AND ((FIRST OR SECOND OR THIRD OR PRIMARY OR SECONDARY OR TERTIARY OR "1ST" OR "2ND" OR "3RD") SAME (CONTROL\$4 OR EVALUAT\$4 OR PIN OR DIODE OR RELAY OR SWITCH\$4 OR ANALYSIS OR ANALYZ\$4 OR CONTROLLABLE OR ADJUST\$4) SAME (ISOLAT\$4 OR INDIVIDUAL\$2 OR INDEPENDENT\$2 OR SEPARAT\$4 OR RESPECTIV\$3) SAME (STATE OR "ON" OR "OFF" OR ACTIVE OR INACTIVE OR ACTIVAT\$4 OR INACTIV\$4 OR MODE)) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	4

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**Search Results** - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 20040257073 A1

L67: Entry 1 of 1

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw D
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Term	Documents
COIL	1335125
COILS	442793
ANTENNA	405437
ANTENNAS	97642
PROBE	403790
PROBES	189855
WINDING	734350
WINDINGS	248167
COMPONENT	3063550
COMPONENTS	3542659
ELEMENT	3834634
(L66 AND ((COIL OR ANTENNA OR PROBE OR WINDING) SAME (COMPONENT OR ELEMENT OR CIRCUIT	

OR CIRCUITRY)) SAME (EXTEND\$4 OR PROJECT\$4) SAME ((SECTION OR PORTION\$4 OR SUBSECTION\$4 OR SUB-SECTION\$4 OR SEGMENT\$3 OR SEGMENTATION OR PART OR SEGMENTABLE OR SECTIONABLE OR SUB- STRUCTURE OR SUBSTRUCTURE OR SUBARRAY OR SUB- ARRAY) SAME (AXIS OR AXES))) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	1
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[Generate OACS](#)

Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20040257073 A1

L69: Entry 1 of 2

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	IMC	Draw D
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☐ 2. Document ID: US 7106063 B1

L69: Entry 2 of 2

File: USPT

Sep 12, 2006

US-PAT-NO: 7106063

DOCUMENT-IDENTIFIER: US 7106063 B1

TITLE: Axially constrained RF probe coil

DATE-ISSUED: September 12, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Zens; Albert P.	Salinas	CA		US
Nakatani; Peter	Concord	CA		US

US-CL-CURRENT: 324/318; 324/422

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	IMC	Draw D
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Term	Documents
AUXILIARY	752387
AUXILIARIES	37878
AUXILIARYS	18
AUXILLIARY	4784
AUXILLIARIES	231
AUXILLIARYS	0
ADDITIONAL	3402015
ADDITIONALS	50
SEPARATE	3066152
SEPARATES	365227
ANOTHER	13
(L68 AND (((AUXILIARY OR AUXILLIARY OR ADDITIONAL OR SEPARATE OR ANOTHER OR SUPPLEMENTAL\$2 OR "ADJACENT\$2") SAME (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) SAME ((INDUCT\$4 OR INDUCTIVELY) SAME (COUPL\$4 OR DECOUPL\$4 OR DE-COUPL\$4)) SAME (PARALLEL)) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	2

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[First Hit](#) [Fwd Refs](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)**End of Result Set**☐ [Generate Collection](#) [Print](#)

L69: Entry 2 of 2

File: USPT

Sep 12, 2006

US-PAT-NO: 7106063

DOCUMENT-IDENTIFIER: US 7106063 B1

TITLE: Axially constrained RF probe coil

DATE-ISSUED: September 12, 2006

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Zens; Albert P.	Salinas	CA		US
Nakatani; Peter	Concord	CA		US

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Varian, Inc.	Palo Alto	CA		US	02

APPL-NO: 11/198077 [PALM]

DATE FILED: August 5, 2005

## INT-CL-ISSUED:

TYPE	IPC	DATE	IPC-OLD
IPCP	G01V3/00	20060101	G01V003/00

## INT-CL-CURRENT:

TYPE	IPC	DATE
CIPP	<u>G01 V 3/00</u>	20060101

US-CL-ISSUED: 324/318; 324/422

US-CL-CURRENT: 324/318; 324/422

FIELD-OF-CLASSIFICATION-SEARCH: 324/318, 324/322, 324/319, 324/309, 324/307, 324/300, 600/410, 600/422

See application file for complete search history.

## PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

[Search Selected](#)[Search ALL](#)[Clear](#)

PAT-NO

ISSUE-DATE

PATENTEE-NAME

US-CL

<input type="checkbox"/>	<u>4388601</u>	June 1983	Sneed et al.	333/227
<input type="checkbox"/>	<u>4517516</u>	May 1985	Hill et al.	
<input type="checkbox"/>	<u>4549136</u>	October 1985	Zens	
<input type="checkbox"/>	<u>4607224</u>	August 1986	Codrington	
<input type="checkbox"/>	<u>5192911</u>	March 1993	Hill et al.	
<input type="checkbox"/>	<u>6008650</u>	December 1999	Behbin	
<input type="checkbox"/>	<u>6054855</u>	April 2000	Anderson	324/318
<input type="checkbox"/>	<u>6917201</u>	July 2005	de Swiet	

ART-UNIT: 2859

PRIMARY-EXAMINER: Shrivastav; Btj B.

ATTY-AGENT-FIRM: Berkowitz; Edward H. Fishman; Bella

ABSTRACT:

An NMR resonant structure is formed of axial conductors (54a, 54b, 54c, and 54d) and end members (50,51), supporting said conductors to form a coil structure (8) of desired electrical topology wherein the end members combine the function of RF interconnects between selected axial conductors (inductors) with an axial constraint on RF field prevailing outside the axial bounds of the end members, and if so desired, comprise a selected capacitance 61 for the resonant structure.

10 Claims, 12 Drawing figures

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### Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 20040257073 A1

L74: Entry 1 of 3

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMK	Draw D
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☐ 2. Document ID: US 3103623 A

L74: Entry 2 of 3

File: USOC

Sep 10, 1963

US-PAT-NO: 3103623

DOCUMENT-IDENTIFIER: US 3103623 A

TITLE: Nuclear gyroscope

DATE-ISSUED: September 10, 1963

INVENTOR-NAME: GREENWOOD JR IVAN A

US-CL-CURRENT: 324/302; 73/514.39, 74/5R

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMK	Draw D
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☐ 3. Document ID: US 2973471 A

L74: Entry 3 of 3

File: USOC

Feb 28, 1961

US-PAT-NO: 2973471



DOCUMENT-IDENTIFIER: US 2973471 A

TITLE: Analysis techniques based on nuclear magnetic resonance

DATE-ISSUED: February 28, 1961

INVENTOR-NAME: ARMISTEAD FONTAINE C; TIRICO ARTHUR L

US-CL-CURRENT: 324/303, 175/393, 175/404, 175/405.1, 175/50, 73/152.03, 73/152.11

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	IMC	Draw D
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Term	Documents
SELECTIVELY	1533502
SELECTIVELIES	0
SELECTIVELYS	5
CHOOSE	195605
CHOOSES	71152
CHOSEN	1031379
CHOSENS	4
CHOOSING	146694
CHOOSINGS	8
CHOOSABLE	258
CHOOSABLES	0
(L73 AND ((SELECT\$4 OR SELECTIVELY OR CHOOSE OR CHOSEN OR CHOOSING OR CHOOSABLE OR CHOICE) SAME (CONTROL\$4 OR EVALUAT\$4 OR PIN OR DIODE OR RELAY OR SWITCH\$4 OR ANALYSIS OR ANALYZ\$4 OR CONTROLLABLE) SAME (ISOLAT\$4 OR INDIVIDUAL\$2 OR INDEPENDENT\$2 OR SEPARAT\$4 OR RESPECTIV\$3) SAME (TUNE OR TUNED OR TUNING OR TUNABLE OR ALIGN\$4) SAME (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3

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Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 20040257073 A1

L76: Entry 1 of 2

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 2973471 A

L76: Entry 2 of 2

File: USOC

Feb 28, 1961

US-PAT-NO: 2973471

DOCUMENT-IDENTIFIER: US 2973471 A

TITLE: Analysis techniques based on nuclear magnetic resonance

DATE-ISSUED: February 28, 1961

INVENTOR-NAME: ARMISTEAD FONTAINE C; TIRICO ARTHUR L

US-CL-CURRENT: 324/303, 175/393, 175/404, 175/405.1, 175/50, 73/152.03, 73/152.11

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
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[Clear](#) [Generate Collection](#) [Print](#) [Fwd Refs](#) [Bkwd Refs](#) [Generate OACS](#)

Term	Documents
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TRANSMISSION	2189534
TRANSMISSIONS	152195
SENT	946560
SENTS	16672
EXCITATION	269482
EXCITATIONS	8138
CURRENT	3250337
CURRENTS	430856
BELOW	4393015
BELOWS	844
ABOVE	7153626
(L75 AND ((LAG\$4 OR LEAD\$4 AND BELOW OR ABOVE OR FRONT OR BACK OR BEHIND OR AHEAD OR BEFORE OR AFTER) SAME ((TRANSMIT\$4 OR TRANSMISSION OR SENT OR SEND\$3 OR EXCIT\$4 OR EXCITATION) WITH (CURRENT))) ) .PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	2

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### Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 20040257073 A1

L83: Entry 1 of 3

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 20040257073 A1, DE 10316557 A1

L83: Entry 2 of 3

File: DWPI

Dec 23, 2004

DERWENT-ACC-NO: 2004-814821

DERWENT-WEEK: 200504

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TITLE: Elementary antenna e.g. for magnetic resonances and antenna array with several such elementary antennas, has section axis extending from first section, with first auxiliary circle arranged besides it

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw D
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☐ 3. Document ID: US 3434043 A

L83: Entry 3 of 3

File: USOC

Mar 18, 1969

US-PAT-NO: 3434043

DOCUMENT-IDENTIFIER: US 3434043 A

TITLE: NUCLEAR MAGNETIC RESONANCE PROBE APPARATUS HAVING DOUBLE TUNED COIL SYSTEMS

FOR SPECTROMETERS EMPLOYING AN INTERNAL REFERENCE

DATE-ISSUED: March 18, 1969

INVENTOR-NAME: NELSON FORREST A

US-CL-CURRENT: 324/310; 324/322

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	IMC	Draw D
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Fwd Refs

Bkwd Refs

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Term	Documents
AUXILIARY	752387
AUXILIARIES	37878
AUXILIARYS	18
AUXILLIARY	4784
AUXILLIARIES	231
AUXILLIARYS	0
ADDITIONAL	3402015
ADDITIONALS	50
SEPARATE	3066152
SEPARATES	365227
(L1 AND (((AUXILIARY OR AUXILLIARY OR ADDITIONAL OR SEPARATE OR ANOTHER OR SUPPLEMENTAL\$2 OR "ADJACENT\$2") SAME (COMPONENT OR ELEMENT OR CIRCUIT OR CIRCUITRY)) SAME ((INDUCT\$4 OR INDUCTIVELY) SAME (COUPL\$4 OR DECOUPL\$4 OR DE-COUP\$4)) SAME (PARALLEL) SAME ((LENGTH OR DISTANCE) SAME ((SECTION OR PORTION\$4 OR SUBSECTION\$4 OR SUB-SECTION\$4 OR SEGMENT\$3 OR SEGMENTATION OR PART OR SEGMENTABLE OR SECTIONABLE OR SUB- STRUCTURE OR SUBSTRUCTURE OR SUBARRAY OR SUB- ARRAY) SAME (AXIS OR AXES))))).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3

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Search Results - Record(s) 1 through 12 of 12 returned.

☐ 1. Document ID: US 20040257073 A1

L88: Entry 1 of 12

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMC	Draw D
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☐ 2. Document ID: US 3321604 A

L88: Entry 2 of 12

File: USOC

May 23, 1967

US-PAT-NO: 3321604

DOCUMENT-IDENTIFIER: US 3321604 A

TITLE: Electronic oven

DATE-ISSUED: May 23, 1967

INVENTOR-NAME: STECCA ANTHONY J; BARNAS LOUIS A ; DOKOS SOPHOCLES J ; JARZEMBSKI  
WILLIAM B ; NORRIS PAUL C

US-CL-CURRENT: 219/709, 219/745, 219/750, 331/101, 333/232

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMC	Draw D
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☐ 3. Document ID: US 3278868 A

L88: Entry 3 of 12

File: USOC

Oct 11, 1966

US-PAT-NO: 3278868  
DOCUMENT-IDENTIFIER: US 3278868 A

TITLE: Cavity resonator

DATE-ISSUED: October 11, 1966

INVENTOR-NAME: ALFRED KACH

US-CL-CURRENT: 333/231

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMIC	Draw D
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▮ 4. Document ID: US 2944133 A

L88: Entry 4 of 12

File: USOC

Jul 5, 1960

US-PAT-NO: 2944133  
DOCUMENT-IDENTIFIER: US 2944133 A

TITLE: Radio frequency dielectric heating apparatus

DATE-ISSUED: July 5, 1960

INVENTOR-NAME: TIBBS CHRISTOPHER E M

US-CL-CURRENT: 219/770; 219/778, 333/219

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMIC	Draw D
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▮ 5. Document ID: US 2817064 A

L88: Entry 5 of 12

File: USOC

Dec 17, 1957

US-PAT-NO: 2817064  
DOCUMENT-IDENTIFIER: US 2817064 A

TITLE: Signal coupling system

DATE-ISSUED: December 17, 1957

INVENTOR-NAME: CARLSON DAVID J

US-CL-CURRENT: 333/24R; 333/235, 333/32, 334/3, 334/85

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMIC	Draw D
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▮ 6. Document ID: US 2784378 A

L88: Entry 6 of 12

File: USOC

Mar 5, 1957

US-PAT-NO: 2784378

DOCUMENT-IDENTIFIER: US.2784378 A

TITLE: Magnetically controlled microwave structures

DATE-ISSUED: March 5, 1957

INVENTOR-NAME: YAGER WILLIAM A

US-CL-CURRENT: 332/163; 332/173, 333/230, 333/24.1, 333/81B

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw D
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☐ 7. Document ID: US 2764742 A

L88: Entry 7 of 12

File: USOC

Sep 25, 1956

US-PAT-NO: 2764742

DOCUMENT-IDENTIFIER: US 2764742 A

TITLE: Variable tuning structures

DATE-ISSUED: September 25, 1956

INVENTOR-NAME: CADY CHARLES E; WAGNER ROSWELL W

US-CL-CURRENT: 333/221, 336/144

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw D
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☐ 8. Document ID: US 2626356 A

L88: Entry 8 of 12

File: USOC

Jan 20, 1953

US-PAT-NO: 2626356

DOCUMENT-IDENTIFIER: US 2626356 A

TITLE: Ultrahigh-frequency generator

DATE-ISSUED: January 20, 1953

INVENTOR-NAME: GIBSON JOHN E

US-CL-CURRENT: 331/70; 315/5.16, 315/5.44, 330/45, 331/181, 331/98, 333/235

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw D
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☐ 9. Document ID: US 2602146 A

L88: Entry 9 of 12

File: USOC

Jul 1, 1952



US-PAT-NO: 2602146  
DOCUMENT-IDENTIFIER: US 2602146 A

TITLE: Microwave generator

DATE-ISSUED: July 1, 1952

INVENTOR-NAME: FRITZ LUDI

US-CL-CURRENT: 315/5.18; 315/5.48, 315/5.51, 315/5.54, 333/230, 333/231

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	MMC	Draw D
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10. Document ID: US 2543891 A

L88: Entry 10 of 12

File: USOC

Mar 6, 1951

US-PAT-NO: 2543891  
DOCUMENT-IDENTIFIER: US 2543891 A

TITLE: Variable ultra high frequency circuits

DATE-ISSUED: March 6, 1951

INVENTOR-NAME: CARLSON WENDELL L; HARVEY ROBERT L

US-CL-CURRENT: 331/96, 331/170, 331/181, 333/235, 334/81

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	MMC	Draw D
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11. Document ID: US 2413836 A

L88: Entry 11 of 12

File: USOC

Jan 7, 1947

US-PAT-NO: 2413836  
DOCUMENT-IDENTIFIER: US 2413836 A

TITLE: High-frequency tuning device

DATE-ISSUED: January 7, 1947

INVENTOR-NAME: LARSON GILBERT C

US-CL-CURRENT: 333/221; 334/67

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	MMC	Draw D
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12. Document ID: US 2107387 A

L88: Entry 12 of 12

File: USOC

Feb 8, 1938

US-PAT-NO: 2107387

DOCUMENT-IDENTIFIER: US 2107387 A

TITLE: Vacuum tube with tank circuits

DATE-ISSUED: February 8, 1938

INVENTOR-NAME: KIMBALL POTTER RALPH

US-CL-CURRENT: 331/96; 313/246, 313/248, 313/249, 313/253, 313/254, 313/270,  
313/284, 313/285, 313/293, 313/312, 313/325 , 315/44, 315/60, 331/167

# Hit List

**Search Results** - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 20040257073 A1

L90: Entry 1 of 1

File: PGPB

Dec 23, 2004

PGPUB-DOCUMENT-NUMBER: 20040257073

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040257073 A1

TITLE: Antenna element and antenna arrangement for magnetic resonance applications

PUBLICATION-DATE: December 23, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Greim, Helmut	Adelsdorf		DE

US-CL-CURRENT: 324/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMIC	Drawings
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Term	Documents
MAGNETIC	1728571
MAGNETICS	15795
MRI	38717
MRIS	605
NMR	178514
NMRS	309
RESONAN\$2	0
RESONAN	1140
RESONANA	3
RESONANAE	3
RESONANAT	8
(L89 AND ((MAGNETIC ADJ RESONAN\$2) OR MRI OR NMR) ). PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD.	1